

JAN 17 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: RTSP-0249

Inventors: Ward et al.

Serial No.: Not Yet Assigned

Filing Date: Herewith

Examiner: Not Yet Assigned

Group Art Unit: Not Yet Assigned

Title: Antisense Modulation of JUN N-Terminal
Kinase Kinase-1 Expression

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Date of Deposit January 17, 2002

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By Jane Massey Licata
Typed Name: Jane Massey Licata, Reg. No. 32,257

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R. §§1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 C.F.R. §1.56(b).

(XX) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified

application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.

- () In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:

- () Certification in Accordance with §1.97(e) is set forth below; or

- () The fee of \$180.00 as set forth in §1.17(p) is attached.

- () In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(i)(1).

- () Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith.

- (**xx**) In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified)

are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. 09/358,382, filed July 21, 1999, for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

() The relevance of the listed references in a foreign language is as stated in the specification at pages @@.

(XX) All listed references are in the English language.

Respectfully submitted,

Jane Massey Licata

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Registration No. 32,257

Date: January 17, 2002

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Form PTO-1449 Modified		Docket No. RTSP-0249	Serial No. Not Yet Assigned
List of Patents and Publications Cited by Application (Use several sheets if necessary)		Applicant Ward et al.	
		Filing Date Herewith	Group Not Yet Assigned
U.S. Department of Commerce Patent and Trademark Office			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AA	Butterfield et al., Stress- and cell type-dependent regulation of transfected c-Jun N- terminal kinase and mitogen-activated protein kinase kinase isoforms, <i>Biochem. J.</i> , 1999, 338:681-686	
	AB	Cuenda et al., Differential activation of stress-activated protein kinase kinases SKK4/MKK7 and SKK1/MKK4 by the mixed-lineage kinase-2 and mitogen-activated protein kinase kinase (MKK) kinase-1, <i>Biochem. J.</i> , 1998, 333:11-15	
	AC	Derijard et al., Independent human MAP-kinase signal transduction pathways defined by MEK and MKK isoforms [published erratum appears in <i>Science</i> 1995 Jul 7;269(5220):17], <i>Science</i> , 1995, 267:682-685	
	AD	Ganiatsas et al., SEK1 deficiency reveals mitogen-activated protein kinase cascade crossregulation and leads to abnormal hepatogenesis, <i>Proc. Natl. Acad. Sci. U. S. A.</i> , 1998, 95:6881-6886	
	AE	Hirai et al., Differential activation of two JNK activators, MKK7 and SEK1, by MKN28- derived nonreceptor serine/threonine kinase/mixed lineage kinase 2, <i>J. Biol. Chem.</i> , 1998, 273:7406-7412	
	AF	Moriguchi et al., Roles of the MAP kinase cascade in vertebrates, <i>Adv. Pharmacol.</i> , 1996, 36:121-137	
	AG	Nishina et al., Impaired TCR-mediated apoptosis and Bcl-XL expression in T cells lacking the stress kinase activator SEK1/MKK4, <i>J. Immunol.</i> , 1998, 161:3416-3420	
	AH	Nishina et al., Defective liver formation and liver cell apoptosis in mice lacking the stress signaling kinase SEK1/MKK4, <i>Development</i> , 1999, 126:505-516	
	AI	Su et al., Mitogen-activated protein kinase cascades and regulation of gene expression, <i>Curr. Opin. Immunol.</i> , 1996, 8:402-411	
EXAMINER		DATE CONSIDERED	

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Form PTO-1449 Modified		Docket No. RTSP-0249	Serial No. Not Yet Assigned
List of Patents and Publications Cited by Application (Use several sheets if necessary)		Applicant Ward et al.	
		Filing Date Herewith	Group Not Yet Assigned
U.S. Department of Commerce Patent and Trademark Office			
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	AJ	Su et al., Alterations in pancreatic, biliary, and breast carcinomas support MKK4 as a genetically targeted tumor suppressor gene, Cancer Res., 1998, 58:2339-2342	
	AK	Teng et al., Human mitogen-activated protein kinase kinase 4 as a candidate tumor suppressor, Cancer Res., 1997, 57:4177-4182	
	AL	Xia et al., JNKK1 organizes a MAP kinase module through specific and sequential interactions with upstream and downstream components mediated by its amino-terminal extension, Genes Dev., 1998, 12:3369-3381	
	AM	Yamauchi et al., Differential regulation of mitogen-activated protein kinase kinase 4 (MKK4) and 7 (MKK7) by signaling from G protein beta gamma subunit in human embryonal kidney 293 cells, J. Biol. Chem., 1999, 274:1957-1965	
	AN	Yang et al., Targeted disruption of the MKK4 gene causes embryonic death, inhibition of c-Jun NH2-terminal kinase activation, and defects in AP-1 transcriptional activity, Proc. Natl. Acad. Sci. U. S. A., 1997, 94:3004-3009	
EXAMINER		DATE CONSIDERED	

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Form PTO-1449 Modified	Docket No. RTSP-0249	Serial No. Not Yet Assigned
List of Patents and Publications Cited by Application (Use several sheets if necessary)	Applicant Ward et al.	
U.S. Department of Commerce Patent and Trademark Office	Filing Date Herewith	Group Not Yet Assigned
U.S. PATENT DOCUMENTS		

Examiner's Initial		Document No.	Date	Name	Class	Subclass
	AA	5,804,427	09/08/1998	Davis et al.	435	194
	AB	5,736,381	04/07/1998	Davis et al.	435	252.3
	AC					
	AD					
	AE					
	AF					
	AG					
	AH					
	AI					
	AJ					
	AK					
	AL					
	AM					
	AN					

FOREIGN PATENT DOCUMENTS

Examiner's Initial		Document No.	Date	Country	Translation YES NO	
	AO	WO 98/54203	12/03/1998	PCT	X	
	AP					
	AQ					
	AR					
	AS					
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	AX					

EXAMINER	DATE CONSIDERED
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